FIVE NEW LIZARDS FROM WESTERN AUSTRALIA

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[Received 23 February 1979. Accepted 12 April 1979. Published 30 November 1979.]

ABSTRACT

A gecko Diplodactylus rankini, a pygopodid Aprasia rostrata fusca and three skinks Ctenotus colletti rufescens, Lerista christinae and Notoscincus butleri are described as new.

INTRODUCTION

The entire type series of three of these taxa were collected during fieldwork in the Exmouth Gulf region, carried out for the Western Australian Museum by Messrs T.M.S. Hanlon, D. Knowles, G. Barron and G. Harold and financed by grants from Mr and Mrs W.H. Butler.

GEKKONIDAE

DIPLODACTYLUS RANKINI SP. NOV.

Holotype

R61474 in Western Australian Museum, collected on 7 December 1978 by Messrs G. Harold and G. Barron at mouth of Yardie Creek, Western Australia, in 22°20'S, 113°48'E.

Diagnosis

A member of the *D. strophurus* group (Kluge, 1967: 1031) generally intermediate between *D. spinigerus* and *D. strophurus*. Distinguishable from *spinigerus* by absence of spines and of black vertebral stripe, and from

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strophurus by restriction of dorsal tubercles to a dorsolateral series (rather than scattered over entire width of back) and absence of narrow, partly concealed bands of yellowish skin on tail.

Distribution

Upper west coast of Western Australia. Active at night in trees and shrubs on white coastal dunes.



Plate 1: Holotype of Diplodactylus rankini photographed in life by G. Harold.

Description

Snout-vent length (mm): 47-63 (N 11, mean 56.1). Length of tail (% SVL): 61-67 (N 7, mean 64.0).

Rostral pentagonal, 2.2-3.3 (2.7) times as wide as high; median groove extending down 20-100% of scale. Nostril surrounded by first labial, rostral, two supranasals and one or two postnasals. Anterior supranasals much the larger and separated by 1-3 (2.1) scales; posterior separated by 4-6 (5.1) scales. Interorbitals 20-27 (23.5). No supraciliary (or other) spines. Upper labials 8-10 (N 11, mean 9.0) back to level of eye. Dorsal scales moderately large, juxtaposed and homogeneous except for a sparse dorsolateral series of slightly larger and higher scales. Dorsolateral tubercles on tail more regularly located and a little higher than those on back, each tubercle on same whorl as its opposite number and separated from it by 3 scales which are a little higher than other nontubercular supracaudals (in *D. spinigerus* the dorsolateral spines are separated by 4-6 granules which are not differentiated from other supracaudal granules). On each side of five specimens 4-6 (5.0) preanal pores and 3 large cloacal spurs; no pores or spurs in other specimens (presumably female). Under fourth toe 4 or 5 (mostly 4) large transverse lamellae, followed proximally by 1-3 (mostly 2) rows of two circular scales.

Upper parts pale grey, becoming darker on snout and lips. Under parts greyish white.

Remarks

Named in memory of Peter Rankin, whose death in New Caledonia in January 1979 tragically cut short what promised to be a brilliant career in systematic herpetology.

Paratypes

North-west Division (W.A.): mouth of Yardie Creek (61171-3, 61482); Ningaloo (61407-10); Point Cloates (15220); Coral Bay (31940).

PYGOPODIDAE

APRASIA ROSTRATA FUSCA SUBSP. NOV.

Holotype

R61077 in Western Australian Museum, collected on 14 December 1978 by Messrs T.M.S. Hanlon and D. Knowles at 3 km NW of Bullara, W.A., in 22°40'S, 114°02'E.

Diagnosis

A narrow-headed long-snouted member of the *A. repens* superspecies, distinguishable from *A. rostrata rostrata* by its much darker coloration (especially of lateral and ventral surfaces), from *A. haroldi* by 5 (rather than 4) upper labials, and from *A. repens* by 14 (rather than 12) rows of midbody scales.

Distribution

The Exmouth Gulf region of Western Australia, in both the white dunes along the coast and red dunes further inland.

Description

Snout-vent length (mm): 75-107 (N 4, mean 89).

Scutellation as in A. r. rostrata, as exemplified by the paratype (the holotype of A. rostrata, figured by Kluge (1974:64), is freakish.)

Head pale brown, variegated with black or dark brown. Back brownish white with 4 black or blackish brown lines (passing through centres of paravertebral and laterodorsal scales), the central pair finer and less continuous than the outer. Scales on sides of body whitish, broadly edged and centrally streaked with black or blackish brown, so that flanks could be described as blackish with whitish elliptic spots. Tail dorsally and laterally pale buffy yellow with about 10 dark brown lines, each passing through centres of scales. Under head and body brownish white, densely flecked with dark brown. Under tail pale yellow. Regenerated tail pale buffy yellow clouded with dark brown.

Paratypes

North-west Division (W.A.): mouth of Yardie Creek (61454); 3 km NW of Bullara (61078-9).

SCINCIDAE

CTENOTUS COLLETTI RUFESCENS SUBSP. NOV.

Holotype

R61152 in Western Australian Museum, collected by Messrs T.M.S. Hanlon & D. Knowles on 13 December 1978 at 3 km E of Giralia, Western Australia, in 22°41′S, 114°23′E.

Diagnosis

Differing from C. c. colletti and C. c. nasutus by its longer appendages, the upper lateral zone splitting into two dark stripes on temples, and the foreback suffused in life with red. It agrees with C. c. colletti in dorsal pattern but, like C. c. nasutus, it has contiguous prefrontals and fewer midbody scale rows.

Distribution

Red sand-ridges in the vicinity of Exmouth Gulf, Western Australia.



Plate 2: Holotype of *Ctenotus colletti rufescens* photographed in life by T.M.S. Hanlon.

Description

Snout-vent length (mm): 29-43. Length of appendages (% SVL): foreleg 28-30, hindleg 46-50, tail 239-244.

Nasals in contact or very narrowly separated. Prefrontals in contact. Supraoculars 4, first 3 in contact with frontal, first very wide. Supraciliaries 6 (5 on one side of one specimen). Palpebrals (*recte* upper ciliaries) 8-10. Presuboculars 2. Upper labials 7 (8 on one side of one specimen). Ear lobules 1-3 (mostly 2, first very large and very obtuse). Nuchals 3-5. Midbody scale rows 23-24. Lamellae under fourth toe 23-26, each with a fine, very weak keel (keels weakest or absent on proximal lamellae).

In spirits dorsally pale brown with 7 narrow dark brown or blackish stripes, the outermost (laterodorsal) and central (vertebral) being widest and darkest and extending well on to tail, the other pair on each side fusing just behind hindleg and fading soon after. Dark brown spots and streaks on head, the most prominent a median streak from back of frontal to centre of frontonasal. Whitish dorsolateral stripe narrow. Upper lateral zone blackish brown, extending back nearly to tip of tail (on which it becomes paler and narrower), and splitting on temples into two stripes which fuse in front of orbit to form a single loreal stripe which joins its opposite number on tip of snout. White midlateral stripe wide. Narrow brown ventrolateral stripe passing forward (after wide break at ear aperture) through centre of upper labials. Three brown longitudinal stripes on upper surface of limbs, widest and darkest on hindlegs.

Paratypes

North-west Division (W.A.): Vlaming Head (60950); 3 km E of Giralia (60994).

LERISTA CHRISTINAE SP. NOV.

Holotype

R59022 in Western Australian Museum, collected by Miss Christine Davidge in November 1977 in heath 22 km S of Badgingarra, Western Australia, in 30°33'S, 115°26'E.

Diagnosis

A slender *Lerista* with digits 4 + 4 and eyelid immovable. Similar in scutellation to *L. elegans* but much more boldly patterned (back and sides whitish with 6 black longitudinal stripes).

Distribution

Only known from a sandplain 160 km NNW of Perth.

Description (based on holotype, the only available specimen)

Snout-vent length (mm): 34.5. Length of appendages (% SVL): foreleg 18, hindleg 32, tail 130, snout to foreleg 35.

Nasals in contact. Prefrontals widely separated. Frontoparietals in long contact, smaller than interparietal. Supraoculars 3, first two in contact with frontal. Supraciliaries 4, first three subequal, last much the smallest. Temporals 3, upper secondary much the largest, lower secondary much the smallest. Upper labials 6. Midbody scale rows 16. Lamellae under longest toe (third) 16/17.

Ground colour of head pale olive grey, of back very pale olive grey (almost white), and of tail very pale brownish grey. On each side a moderately wide



Plate 3: Photograph of holotype of Lerista christinae.

black paravertebral stripe from nape to base of tail, extending to head and middle of tail in a series of short ill-defined blackish brown dashes. Wide black upper lateral stripe from eye to base of tail, continuing forward as a narrowing stripe through lores to side of rostral, and back as an irregular series of blackish brown dots to middle of tail. Broad white midlateral stripe from upper lips to base of tail. Narrow black lower lateral stripe from a little in front of foreleg to a little behind hindleg. Limbs pale greyish brown, variegated with blackish brown. Under toes greyish brown; rest of under parts white, becoming buffy under tail.

NOTOSCINCUS BUTLERI SP. NOV.

Holotype

R61518 in Western Australian Museum, collected by Mr W.H. Butler on 10 January 1979 at 30 km SSW of Dampier, Western Australia, in 20°55'S, 116°39'E.

Diagnosis

A relatively large and stout *Notoscincus* whose colour pattern consists almost wholly of bold, dark and pale longitudinal stripes. Further differing from both subspecies of N. *ornatus* by more numerous midbody scale rows and absence of olive tone to dorsum.

Distribution

Only known from a single locality in the Pilbara region, north-western Western Australia.

Description (excluding characters listed for genus by Storr, 1974)

Snout-vent length (mm): 34-42 (N 9, mean 37.0). Length of appendages (% SVL): foreleg 24-29 (mean 26.9), hindleg 39-44 (41.7), tail 170-181 (N 3, mean 176).

Nasals moderately to narrowly separated. Prefrontals in medium to long contact. Supraciliaries 6. Nuchals 1-4 (2.9). Ear lobules 2-4 (small, first largest, usually extremely obtuse). Midbody scale rows 28-32 (29.8). Lamellae under longest toe 22-24 (23.0), divided.

Dorsal and lateral ground colour dark brown. Back and sides with 8 subequally wide pale stripes: on each side a pale brown paravertebral and



Plate 4: Photograph of holotype of Notoscincus butleri.

dorsolateral and a whitish midlateral and ventrolateral; midlateral extending forwards over lips to just beyond orbit and backwards nearly to tip of tail. Dark vertebral stripe usually represented on tail by a series of large spots, and laterodorsal usually by small spots. Limbs whitish with dark brown markings taking form of vague longitudinal streaks or series of spots.

Remarks

Named after its discoverer, W.H. Butler, M.B.E., Honorary Associate and generous benefactor of the Western Australian Museum. The type series was collected under an old Wedge-tailed Eagle's nest that had fallen from a bloodwood. The litter under adjacent bloodwoods was unsuccessfully searched for more examples of this skink (W.H. Butler, pers. comm.).

Paratypes

North-west Division (W.A.): 30 km SSW of Dampier (61510-7).

REFERENCES

- KLUGE, A.G. (1967) Systematics, phylogeny and zoogeography of the lizard genus *Diplodactylus* Gray (Gekkonidae). *Aust. J. Zool.* 15: 1007-1108.
- KLUGE, A.G. (1974) A taxonomic revision of the lizard family Pygopodidae. Misc. Publs Mus. Zool. Univ. Mich. no. 147.
- STORR, G.M. (1974) The genus Notoscincus (Lacertilia, Scincidae) in Western Australia and Northern Territory. Rec. West. Aust. Mus. 3: 111-114.